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CENTRAL FAX CENTER****APR 05 2006****Patent****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In Re Application of:

Ronald E. Gillingham

Serial No. 10/707,484

Group Art Unit: 1771

Filed: 12/17/2003

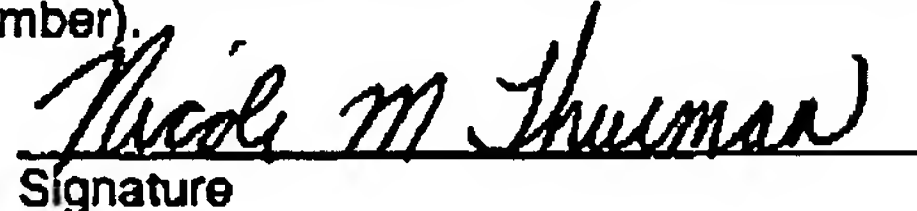
Examiner: Jeremy R. Pierce

For: TWIN SHEET THERMOPLASTIC HEADLINER WITH INTEGRAL FEATURES  
FOR HEAD IMPACT COMPLIANCE

Attorney Docket No. 81094960

**CERTIFICATE OF MAILING/TRANSMISSION (37 C.F.R. § 1.8(a))**

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SignatureDate: 4/5/06Nicole M. Thurman**BRIEF ON APPEAL**Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The following Appeal Brief is submitted pursuant to the Notice of Appeal dated February 6, 2006, for the above-identified application.

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**I. Real Party in Interest**

The real party in interest in this matter is Ford Global Technologies, LLC, which is a wholly owned subsidiary of Ford Motor Company, both of Dearborn, Michigan (hereinafter "Ford").

**II. Related Appeals and Interferences**

There are no other known appeals or interferences which will directly affect or be directly affected by or have bearing on the Board's decision in the pending appeal.

**III. Status of the Claims**

Claims 11, 12 and 14-21 stand rejected in the Final Office Action.

**IV. Status of Amendments**

No Amendments were filed after the final rejection.

**V. Summary of Claimed Subject Matter**

The present invention is directed toward a headliner for a vehicle. The headliner is manufactured according to a one-step method, such that a complete headliner is formed which meets Federal head impact compliance standards. (See Appellants' specification at paragraph 39). This inventive headliner obviates the need for additional flex crush tubes, stranded foam blocks and other filler needed to meet Federal head impact compliance standards. (See Appellant's specification at paragraph 39). Appellants' headliner uses at least one top layer including a plurality of surface contours and at least one bottom layer including a plurality of surface contours. The top and bottom layers are substantially joined together to form an integral headliner including at least one area between the inner surfaces of the top and bottom layers defining a cavity, with the top layer being independent from the bottom layer prior to being joined to the bottom layer. The surface contours of the top and bottom layers define convex and concave members for absorption of impact energy. The convex and concave members may be in the shape of a waffle, cone, conical section, pyramid, truncated pyramid, rectangular solid, rectangle, cube, sphere, spheroid, ellipse, truncated ellipse, rhombohedral solid, and/or truncated rhombohedral solid. (See Appellant's specification at paragraph 21.) Because Appellant's headliner is complete as formed, with a single top and bottom layer 24 which is shown as smooth and finished, no additional components, such as interior trim, need be added either to finish Appellants' headliner, or to improve energy absorption. As a result, the present headliner is functionally and economically superior to known headliners, including any headliner cited by the Examiner during prosecution of this case.

**VI. Grounds of Rejection to be Reviewed on Appeal**

Are Claims 12 and 14-21 and properly rejected under 35 U.S.C. 102(b) as being anticipated by *Carroll et al.* (US 2003/0017805)?

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Are Claims 12 and 14-21 and properly rejected under 35 U.S.C. 102(b) as being anticipated by *Wandyez* (U.S. Patent No. 6,086,145)?

Is Claim 11 properly rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being obvious over *Carroll et al.*?

Is Claim 11 properly rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being obvious over *Wandyez*?

## VII. Argument

Claims 12 and 14-21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Carroll et al.* (2002/0017805). The Examiner states that *Carroll et al.* discloses an energy absorbing assembly including an upper layer having contours which may be combined with a lower layer having contours so that a cavity is formed between the two layers. The Examiner also asserts that *Carroll et al.* discloses that *Carroll's* material meets head inquiry criteria, citing paragraph 68 of *Carroll et al.* With respect to claim 16, the Examiner asserts that *Carroll et al.* teaches other components that may be included in a composite including delta structures, acoustic dampeners, and pellets or beads. With respect to claims 17-20, the Examiner asserts that *Carroll's* recesses are circular in nature (Figure 11) and that *Carroll et al.* teaches that other shapes may be used (*Carroll et al.* paragraph 43). With respect to claim 21, the Examiner states that *Carroll et al.* uses a thermoplastic sheet, (*Carroll et al.* paragraph 51).

As set forth in Appellants' claims, a headliner for a vehicle includes at least one top layer including a plurality of surface contours, and at least one bottom layer including a plurality of surface contours, with the top and bottom layers being substantially joined together to form an integral headliner including at least one area between the top and bottom layers defining a cavity. The top layer is independent from the bottom layer prior to being joined to the bottom layer. As shown in the various figures, bottom layer 24 is smooth and presents a finished appearance.

To reiterate, Appellants are claiming a headliner. *Carroll et al.*, on the other hand does not disclose a headliner. Rather, *Carroll* discloses an unfinished panel, which, according to *Carroll's* claim 10, is intended to be attached to any one of a vast array of other structures, which may include a headliner. Appellants defy the Examiner to show any vehicle having a headliner with the appearance of *Carroll's* device. Rather, *Carroll et al.* is devoted not to a headliner, but to a structure which could be buried, for example, within the core of a headliner. Accordingly, at paragraph 33, *Carroll et al.* avers that "the invention embraces a sheet of material with recesses formed in it". Although it is true that *Carroll et al.* discloses an energy absorbing assembly, this alone does not mean that *Carroll et al.* discloses a headliner for a vehicle. A headliner, as noted in Appellants' specification at paragraph 3, includes a device mounted inside the passenger compartment of a vehicle for providing an aesthetic covering for the roof's sheet metal and/or framework upon which the headliner is to be mounted. *Carroll et al.* shows something that could be used within a headliner but does not disclose a finished headliner, nor does *Carroll et al.* disclose any completed structure for a headliner.

The Examiner cites *Carroll's* claim 10 for the proposition that *Carroll* discloses a headliner. Appellants' respectfully submit that the Examiner's citation is inapposite because *Carroll's* claim 10 merely recites that *Carroll's* energy absorbing assembly

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may be attached to any one of at least 18 different 'support surfaces' including, but not limited to an instrument panel, a dome light, a bumper beam, a seat, a bumper mount, and yes, even a headliner. Accordingly, the structure proffered by the Examiner cannot itself be a headliner.

To say that *Carroll's* structure is a "headliner" is akin to asserting that a wheel spider having a particular construction is a completed wheel. The use of *Carroll et al.* as a reference in this case is simply inapposite and, as a result, each of claims 12 and 14-21 should be passed to issue over the Examiner's rejection.

Claims 12 and 14-21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Wandyez (U.S. 6,086,145)*. The Examiner states that *Wandyez* discloses a headliner with cavities formed between the upper substrate and lower substrate, with both having concave and convex members.

As set forth in Appellants' claims, Appellants' headliner includes top and bottom layers which are independent prior to being joined together. In contrast, *Wandyez* teaches a headliner having cavities which are formed by blow molding a plastic parison using a method commonly employed for forming plastic bottles. In other words, there is no upper layer and separate lower layer with *Wandyez*, because *Wandyez's* passages are formed by blow molding a plastic parison in a manner not unlike that used to form a plastic bottle. As a result, *Wandyez* cannot form a colorable basis for rejection of Appellants' claims pursuant to 35 U.S.C. § 102(b). Furthermore, unlike Appellants, *Wandyez* does not form a headliner having a finished inner lower surface in a single step.

Claim 11 stands rejected under 35 U.S.C. § 102 as being anticipated by, or under 35 U.S.C. § 103 as obvious over, *Carroll et al.* Claim 11 recites a headliner made according to the method of claim 1, including top and bottom layers with a plurality of surface contours and with the top and bottom layers substantially joined together and including at least one area between defining at least one cavity. As noted above, *Carroll et al.* does not disclose or teach a headliner for a vehicle. Moreover, *Carroll et al.* does not teach a structure which is vacuum formed and has independent top and bottom layers joined together to form an integral headliner. Moreover, the Examiner has not adduced any evidence to support a conclusion of obviousness. For this reason, as well as for the previously cited reasons, *Carroll et al.* cannot comprise a colorable basis for the rejection of Applicants' claim 11.

Claim 11 stands rejected further under 35 U.S.C. § 102(b) as being anticipated, or as an alternative, as being obvious under 35 U.S.C. § 103(a), over *Wandyez*. As noted above, *Wandyez* does not disclose a headliner having independent top and bottom layers. More precisely, *Wandyez* discloses a blow molded parison forming headliner wiring channels. *Wandyez* neither teaches nor suggests Applicants' claimed invention, because *Wandyez* does not teach upper and lower layers which are separate and independent and which are bonded together. Moreover, as with the prior rejection, the Examiner has not adduced any evidence to support a conclusion of obviousness. For this reason, as well as for the previously cited reasons, claim 11 is patentable over *Wandyez*.

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**VIII. Claims Appendix**

A copy of each of the claims involved in this appeal, namely Claims 11, 12, and 14-21, is attached as a Claims Appendix.

**IX. Evidence Appendix**

None.

**X. Related Proceedings**

None.

**XI. Conclusion**

For the foregoing reasons, Appellants respectfully request that the Board direct the Examiner in charge of this case to withdraw the rejection.

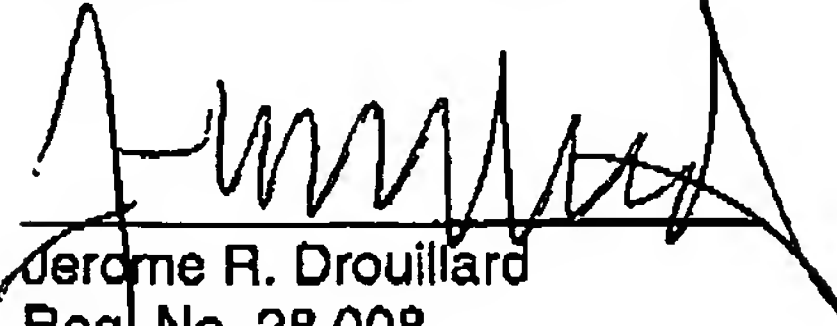
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Respectfully submitted,



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**CLAIMS APPENDIX**

Claim 11. A headliner for a vehicle made by the method of claim 1, said top and bottom layers including a plurality of surface contours, and said top and bottom layers substantially joined together and including at least one area therebetween defining said at least one cavity.

Claim 12. A headliner for a vehicle, said headliner comprising:  
at least one top layer including a plurality of surface contours;  
at least one bottom layer including a plurality of surface contours; and  
said top and bottom layers being substantially joined together to form an integral headliner including at least one area between inner surfaces of said top and bottom layers defining a cavity, therein said top layer is independent from said bottom layer prior to being joined to said bottom layer.

Claim 14. The headliner according to claim 12, wherein said surface contours of said top layer define convex and concave members for absorption of impact energy.

Claim 15. The headliner according to claim 12, wherein said surface contours of said bottom layer define convex and concave members of absorption of impact energy.

Claim 16. The headliner according to claim 12, further comprising:  
other components injected between said top and bottom layers for increasing structural or function vehicle performance.

Claim 17. The headliner according to claim 14, wherein at least one of said convex and concave members being in shape of at least one hexagon, circle, triangle and square solid.

Claim 18. The headliner according to claim 15, wherein at least one of said convex and concave members being in shape of at least one hexagon, circle, triangle, and square solid.

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Claim 19. The headliner according to claim 14, wherein at least one of said convex and concave members being in shape of at least one waffle, cone, conical section, pyramid, truncated pyramid, rectangular solid, rectangle, cube, sphere, spheroid, ellipse, truncated ellipse, rhombohedral solid and truncated rhombohedral solid.

Claim 20. The headliner according to claim 15, wherein at least one of said c convex and concave members being in shape of at least one waffle, cone, conical section, pyramid, truncated pyramid, rectangular solid, rectangle, cube, sphere, spheroid, ellipse, truncated ellipse, rhombohedral solid, and truncated rhombohedral solid.

Claim 21. The headliner according to claim 12, wherein said headliner is made of thermoplastic.

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**EVIDENCE APPENDIX**

None.

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**RELATED PROCEEDINGS**

None.